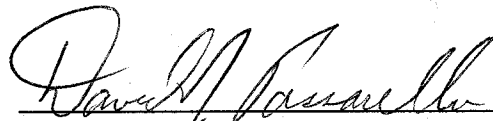


# Collider-Accelerator Department

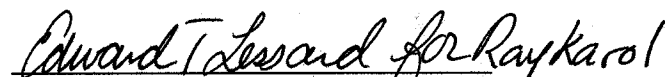
## FY 2003 Self-Assessment Program

Prepared by:

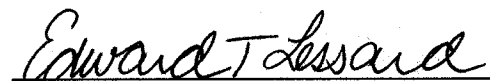
  
David J. Passarello, QA

5/8/03  
Date


Approved by:

  
R. Karol, Division Head, ESHQ

5-9-03  
Date

  
E. Lessard, Associate Chair for ESHQ

5-9-03  
Date

  
D. Lowenstein, Department Chairman

5/13/03  
Date

## Collider-Accelerator (C-A) Department Mission

In support of Brookhaven National Laboratory's broad mission of providing excellent science and advanced technology in a safe, environmentally responsible manner the Collider Accelerator Department is committed to the following:

- ❖ Excellence in environmental responsibility and safety in all C-A Department operations.
- ❖ Develop, improve, and operate the suite of proton/heavy ion accelerators used to carry out the program of accelerator-based experiments at BNL.
- ❖ Support the experimental program including design, construction, and operation of the beam transports to the experiments and partial support of detector and research needs of the experiments.
- ❖ Design and construct new accelerator facilities in support of the BNL and National Missions.

## Self-Assessment Program

The objective of the C-A self-assessment program is to provide a systematic approach to performance management. That is, to provide C-A management with information needed to ensure organizational performance objectives are being met and appropriate improvement actions are identified and implemented.

Supporting information for the objectives of Critical Outcome 1.0, Basic Science & Technology, are reported in the BNL Integrated Information Management System. This system provides the data required for the preparation of BNL Appendix B Self Evaluation Reports.

C-A Self-Assessment supporting information e.g. [Program and Facility](#), [Organization](#), [ESHQ Division](#), [Assessment and Inspection Programs](#), [C-A Environmental Management Program](#), [Authorization Basis Documents](#), [Operations and Procedures Manual](#), [Conduct of Operations Agreement](#), [Training Programs and Associated Records](#) and [Tier 1 Safety Inspections](#) is maintained on the Collider-Accelerator web site.

The C-A Department has adopted a self-assessment framework primarily based on the Malcolm Baldrige National Quality Award Criteria. Which are as follows

- Leadership Commitment and Involvement
- Human Resource Development and Management
- Customer Focus and Satisfaction (Customer Value)
- Process Management
- Business and Operational Results
- Compliance with Laws Regulations and Contractual Requirements

For each of the assessment criteria stated above, C-A has established objectives, strategies for meeting the stated objectives, performance measures, and indicators where appropriate. Refer to the Assessment, Objective, Approach and Results Matrix within this document.

In addition to those items outlined in the attached matrix, the implementation of the following, which are improvement items from the C-A FY 2002 Self-Assessment Report, shall be assessed.

1. Establish a database for assessments performed by external organizations on the C-A Department.

2. Continue to ensure environmental impacts of a fire within the C-A facility are submitted with ESH-related or infrastructure-related Activity Data Sheets; especially ADSs related to the fire-detection system. (ATS 1272.1.1)
3. Continue to work at defining and allocating resources to remove legacy materials. For example, arrange to dispose of the SREL magnet. (ATS 1272.1.2)
4. Evaluate Water Systems Group's process for the testing of devices within C-A Cooling Water Systems
5. Meet with the Environmental Restoration Division and review the EE/CA recommendations for the g-2 plume. Close out the Action Memorandum with the EPA by the targeted date. (ATS 1272.1.3)
6. Assess implementation of C-A OPM 2.28, C-A Procedure For Enhanced Work Planning, key criteria is worker's perspective of their involvement in work planning and control activities.
7. Perform implementation assessments of the following procedures.
  - OPM 13.4.1, Records Management
  - OPM 13.4.2, Records Index
  - OPM 13.6.1 Preparation & Issuance of Engineering Drawings /Specs, and
  - OPM 13.6.2 Configuration Management
8. Continue to employ the BNL Quality Program and Services Office to provide assistance in performing scheduled C-A assessments.

### **Institutional Improvement Recommendations**

The following lab-wide issues were documented in the C-A Environmental Management Review Record of Decision. The C-A Family ATS will be used to document the status of each recommendation.

1. BNL to consider the addition of a second Fire Safety Engineer. (ATS 1272.1.4)
2. For greater efficiency, individual Department/Division 90-day storage areas should be combined into one 90-day storage area located in the Waste Management facility. (ATS 1272.1.4)
3. BNL should examine and reduce waste management costs in a manner that reflects the actual cost of efficient waste handling and disposal. (ATS 1272.1.4)
4. SBMS should be modified such that external construction projects impacting a Department/Division would require Department/Division active involvement in the design, planning and approval process. (ATS 1272.1.4)

<i>ASSESSMENT CRITERIA 1: Leadership Commitment and Involvement</i>			
<i>OBJECTIVE:</i> Excellence in environmental responsibility and safety in all Department operations.			
<i>APPROACH:</i> ES&H <ul style="list-style-type: none"> <li>a) Conduct an EMS management review in accordance with the “Environmental Assessments” Subject Area to ensure the continuing suitability, adequacy and effectiveness of the EMS.</li> <li>b) Successfully undergo the ISO 14001 surveillance audit.</li> </ul>			
Measures	Indicators	Responsibility	Schedule/Due Date
Management Review Completed in accordance with the “Environmental Assessments” Subject Area. Management review completed and “Record of Decision” issued		EMS Representative	Annual September 2003
<u>Results:</u>  <u>Action Items:</u>			
Maintain ISO 14001 Registration ISO 14001 surveillance audit performed by third party, ISO 14001 registration maintained. (ES&H SAM)		Associate Chair for ESHQ	Annual June 2003
<u>Results:</u>  <u>Action Items:</u>			

*ASSESSMENT CRITERIA 2: Human Resource Development and Management*

*OBJECTIVE:*

- 1 Create a pool of talented, empowered, motivated, and goal oriented leaders/managers/workers to support and enhance the C-A competitive position within the DOE laboratory complex.
- 2 Provide a high quality work environment that enhances C-A's ability to retain and attract an excellent workforce.

*APPROACH:*

- 1 Planning for staff development is accomplished via the C-A long-range staffing plan.
- 2 Training is promoted via the C-A Training Plan as described in OPM 1.12, Conduct of Training Policy (Training Plan).
- 3 The overall training strategy is found in two documents:
  - a) [Training Plan Agreement](http://www.rhichome.bnl.gov/AGS/Accel/SND/Training/trainplan.pdf) (<http://www.rhichome.bnl.gov/AGS/Accel/SND/Training/trainplan.pdf>)
  - b) [Training Plan](http://www.rhichome.bnl.gov/AGS/Accel/SND/OPM/Ch01/01-12.PDF) (<http://www.rhichome.bnl.gov/AGS/Accel/SND/OPM/Ch01/01-12.PDF>)
4. Environmental training, which is process specific, may be found at: [Process Specific Training](http://www.rhichome.bnl.gov/AGS/Accel/SND/process_specific_ems_training.htm) ([http://www.rhichome.bnl.gov/AGS/Accel/SND/process\\_specific\\_ems\\_training.htm](http://www.rhichome.bnl.gov/AGS/Accel/SND/process_specific_ems_training.htm))
5. C-A promotes education of its staff through the laboratory reimbursement program for continued college-level education. In addition, C-A encourages and supports its staff to attend technical industrial courses as well as various accelerator and high energy and nuclear physics conferences.
6. Via C-A OPM 9.4.2, Self Evaluations, a self-critical attitude is fostered throughout the department from workers to senior management, this provides the basis for correcting weaknesses as well as promoting best practices. A self-assessment database for action required/completed is maintained by the C-A ES&H/Q Division.
7. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.

Measures	Indicators	Responsibility	Schedule/Due Date
DOE FY03 Office of Science Performance Plan, Page 243 Increase the number and/or diversity of the applicants for summer internships by 10 percent		Associate Chair, Operations	September 2003

Results:

Action Items:

DOE FY03 Office of Science Performance Plan, Page 171 The Office of Science will ensure the safety and health of the workforce and members of the public and protection of the environment in all SC program activities.		Associate Chair, ESHQ	September 2003
---	--	-----------------------	----------------

Results:

Action Items:

<p>Training and Qualification (T&amp;Q) Performance</p> <p>Permanent Employees</p> <ol style="list-style-type: none"> <li>1. % of C-A staff linked to job specific training assessments.</li> <li>2. % of T&amp;Q requirements completed by C-A staff</li> </ol> <p>Transient Staff</p> <ol style="list-style-type: none"> <li>1. % of staff linked to job specific training assessments.</li> <li>2. % of T&amp;Q requirements completed by staff</li> </ol>	% of required training completed.	Training & Procedures Manager	<p>June 2003</p> <p>September 2003</p>
<p><u>Results:</u></p> <p><u>Action Items:</u></p>			

<i>ASSESSMENT CRITERIA 3: Customer Focus and Satisfaction (Customer Value)</i>			
<i>OBJECTIVE:</i> Operate the C-A facility in a manner that is responsive to C-A internal and external customer expectations.			
<i>APPROACH:</i> <ol style="list-style-type: none"> <li>1. Understanding of customer and market needs is accomplished via discussions, formal proposals and formal agreements between experimenters (users) and C-A staff.</li> <li>2. Stakeholders inquiries related to the operation of the C-A are recorded in the BNL Correspondence and Commitment Tracking System maintained by the Collider-Accelerator Department</li> <li>3. Support BNL's initiative regarding the BNL Communication and Trust critical outcome.</li> <li>4. Customer and stakeholder expectations are identified in Memoranda of Agreement/Understanding between C-A Operations and the facility users. Integrating user and performance expectations into the C-A management systems is accomplished by setting operational goals, which are documented in OPM 2.1, C-A Operations Organization &amp; Administration.</li> <li>5. The AGS/RHIC Users Committee is a committee that represents the user community in various matters, such as programmatic satisfaction and dissatisfaction, quality of life matters, etc. They communicate both verbally and in writing to the directorate as well as line managers.</li> <li>6. During operations, the weekly Time Meetings allow experimenters to discuss status, identify scheduling priorities, identify user requirements for the up coming week, voice complaints and at the same time, provide easy immediate access to all the C-A resources and staff.</li> <li>7. Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.</li> </ol>			
Measures	Indicators	Responsibility	Schedule/Due Date
Correspondence and Commitment Tracking System being implemented per the BNL SBMS Subject Area.		Office of the Department Chairman.	September 2003
<u>Results:</u>			
<u>Action Items:</u>			

*ASSESSMENT CRITERIA 4: Process Management*

**OBJECTIVE:**

Establish, maintain and improve C-A processes/procedures for implementing Laboratory and organizational expectations.

**APPROACH:**

- 1 Implement the requirements of BNL SBMS Subject Area Work Planning and Control for Experiments and Operation. C-A OPM 9.2.1, Procedure For Reviewing Environmental, Health and Safety Aspects Of An Experiment ensures C-A complies with BNL requirements for the planning and control of experiments, C-A OPM 2.28, C-A Procedure For Enhanced Work Planning (which includes Stop Work policy) ensures C-A complies with BNL requirements for work planning and control systems as defined in BNL SBMS Subject Area Work Planning and Control for Experiments and Operations Assessment of the implementation of the C-A work planning process is performed as part of the C-A Tier I Inspections. All EWP systems within C-A shall be reviewed at a frequency specified by the C-A Work Control Manager.
- 2 Implementation of the BNL ES&H programs, including the EMS, and Conduct of Operations is verified via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in OPM Chapter 9 procedures (e.g. Tier I and Self-Evaluations), C-A OPM 13.10.1, Independent Assessments and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s).
- 3 Periodically assess C-A performance for implementation of Laboratory SBMS and internal process. The scope and frequency of assessment areas is based on
  - Importance, status, risk, and complexity of the activity, item or process;
  - Problems encountered with the activity, or item;
  - Scheduling of specific activities;
  - Availability of qualified personnel;
  - A review of findings reported in previous assessments.This objective supports those assessments performed in compliance objective.

Measures	Indicators	Responsibility	Schedule/Due Date
Perform assessment on the C-A implementation of the BNL Management System- Acquisition Management <ul style="list-style-type: none"><li>• Contract Administration</li><li>• Procurement Quality (PQ)</li></ul>		Q Group	Annual 2 <sup>nd</sup> quarter

Results:

Action Items:

Perform assessment on the C-A implementation of the BNL Management System -Environmental Management <ul style="list-style-type: none"><li>• Regulatory Compliance</li><li>• EMS Assessments</li><li>• Management Review</li></ul> Assessment to be performed in accordance with the “Environmental Assessment” Subject Area and C-A OPM 13.10.1, Independent Assessment.		Q Group	Annual 3 <sup>rd</sup> quarter
--	--	---------	-----------------------------------



<u>Results:</u>  <u>Action Items:</u>			
Perform assessment on the C-A implementation of the BNL Management System -Facility Operations <ul style="list-style-type: none"> <li>• Building and Facility Management</li> </ul>		Q Group	4 <sup>th</sup> quarter
<u>Results:</u>  <u>Action Items:</u>			
Perform assessment on the C-A implementation of the BNL Management System -Life Cycle Asset Management <ul style="list-style-type: none"> <li>• Davis-Bacon Act Self-Assessment</li> <li>• Site and Facility Planning, /Development/Management</li> <li>• Maintenance Management</li> </ul>		Q Group	4 <sup>th</sup> quarter
<u>Results:</u>  <u>Action Items:</u>			
Perform assessment on the C-A implementation of the BNL Management System -Safeguards and Security Management System Core Activities and Requirements including the following areas, as applicable: <ul style="list-style-type: none"> <li>• Site Security Alerts</li> <li>• Property Protection</li> <li>• Operations Security</li> <li>• Visits and Assignments of Foreign Nationals</li> <li>• Material Control and Accountability</li> <li>• Foreign Travel</li> <li>• Limited Areas</li> <li>• Property Protection Areas</li> <li>• Classified Computer Security</li> </ul>		Q Group	4 <sup>th</sup> quarter
<u>Results:</u>  <u>Action Items:</u>			

Perform assessment on the C-A implementation of the BNL Management System -Worker Safety and Health <ul style="list-style-type: none"> <li>• Department ESH Inspections (Tier 1s)</li> <li>• OSHA Roll-Up</li> <li>• Occupational Injury Management</li> <li>• Lockout/Tagout</li> </ul>		Q Group	4 <sup>th</sup> quarter
<u>Results:</u>  <u>Action Items:</u>			

<i>ASSESSMENT CRITERIA 5: Business and Operational Results</i>			
<p><i>OBJECTIVE:</i></p> <ol style="list-style-type: none"> <li>1 Design and construct new accelerator facilities in support of the BNL and national missions.</li> <li>2 Operational               <ol style="list-style-type: none"> <li>a) Operate and improve the suite of proton/heavy ion accelerators and beam transports used to carry out the program of accelerator-based experiments at BNL thus supporting the research mission of the laboratory's user population.</li> <li>b) Support the experimental program including design, construction, and operation of the beam transports to the experiments plus partial support of detector and research needs of the experiments</li> </ol> </li> </ol>			
<p><i>APPROACH:</i></p> <ol style="list-style-type: none"> <li>1 Report construction and operational progress/status to senior management at a frequency established by department/project management.</li> <li>2 Operational:               <ol style="list-style-type: none"> <li>a) The C-A mission is defined in Field Work Proposals (FWP), Conceptual Design Reports and Project Management Plans.</li> <li>b) Changes and upgrades to the accelerators are described in the Accelerator Improvement Projects.</li> </ol> </li> </ol>			
Measures	Indicators	Responsibility	Schedule/Due Date
Critical Outcome 1.0 Basic Science & Technology: Objective 1.3 Success in Constructing and Operating Research Facilities <ol style="list-style-type: none"> <li>1. C-A Operations per <a href="#">FY03 Schedule</a> and the accelerator performance meets the operational goals as specified in the FY 2003 Field Work Proposal.</li> </ol>		Associate Chair, Accelerators	September 2003
<p><u>Results:</u></p> <p><u>Action Items:</u></p>			
DOE FY03 Office of Science Performance Plan, Page 171 The SC scientific user facilities will be operated and maintained so that unscheduled operational downtime will be kept to less than 10%, on average, of total scheduled operating time. SC's operation of major scientific facilities has ensured that a growing number of U.S. scientists have reliable access to those important facilities.		Associate Chair, Accelerators	September 2003
<p><u>Results:</u></p> <p><u>Action Items:</u></p>			
DOE FY03 Office of Science Performance Plan, Page 187 Collect first data with polarized protons with the Solenoid Tracker RHIC (STAR), Pioneering High Energy Nuclear Interacting Experiment (PHENIX), and pp2pp detectors.		Associate Chair, ES&F	September 2003

<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 189 Initiate first round of experiments with collisions with other ions to compare to results of gold-gold collisions.		Associate Chair, Accelerators	September 2003
<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 189 Upgrade the RHIC cryogenics system by replacing turbine oil skids and removing the seal gas compressor, eliminating a single point failure.		Associate Chair, Operations	September 2003
<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 193 Meet the cost and schedule milestones for construction of facilities and Major Items of Equipment within 10 percent of baseline estimates. Complete the Solenoidal Tracker at RHIC (STAR) Electro-Magnetic Calorimeter (EMCAL).		Associate Chair, Accelerators	September 2003
<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 194 NASA facility to be completed in FY 2003. This facility shall use heavy-ion beams from the Booster Synchrotron at RHIC/BNL for studying radiation effects in conjunction with possible future travel to Mars.		Associate Chair, Operations	September 2003
<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 217 Continue construction of the SNS, meeting the cost and timetables within 10 percent of the baselines given in the construction project data sheet, Project Number 99-E-334. At the end of FY 2003, construction of the SNS will be 61 percent complete.		Senior Team Leader, SNS	September 2003

<u>Results:</u>			
<u>Action Items:</u>			
DOE FY03 Office of Science Performance Plan, Page 235 Keep deviations in weeks of operation for each major facility within 10 percent of the approved plan.		Associate Chair, Accelerators	September 2003
<u>Results:</u>			
<u>Action Items:</u>			

<i>ASSESSMENT CRITERIA 6:</i> Compliance with Laws Regulations and Contractual Requirements			
<p><i>OBJECTIVE:</i> Maintain compliance with applicable BNL regulations and contractual expectations.</p>			
<p><i>APPROACH</i></p> <ol style="list-style-type: none"> <li>Compliance requirements are communicated to C-A staff through participation on Laboratory committees, Laboratory Work Groups and through the SBMS. Senior C-A Electrical Engineers and senior C-A staff participate on the Laboratory Electrical Planning Committee, Laboratory Environmental, Health and Safety Committee, Radiation Protection Working Group, Environmental Management System Implementation Group, and Laboratory Electrical Safety Committee, all of which meet regularly.</li> <li>In accordance with the BNL EMS, a regulatory compliance assessment, environmental management review, and EMS assessment shall be performed annually. <ol style="list-style-type: none"> <li>Ensuring compliance to applicable requirements is addressed via scheduled inspections, audits and C-A management, independent and self-assessments. These programs are documented in the C-A OPM, and applicable subject areas. Reports are documented and include a description of the findings, corrective action(s), and identification of responsible individual(s). A general index of C-A ESHQ programs can be found at <a href="http://server.rhichome.bnl.gov/SND/indexoftopics.htm">http://server.rhichome.bnl.gov/SND/indexoftopics.htm</a>.</li> </ol> </li> <li>Perform periodic assessments to determine adequacy and effectiveness of listed strategies to achieve objective.</li> </ol>			
Measures	Indicators	Responsibility	Schedule/Due Date
C-A Environmental Compliance Representative (ECR) performs annual reviews of C-A's compliance with regulatory requirements; including <ul style="list-style-type: none"> <li>Air emissions (radioactive and non-radioactive; i.e. Clean Air Act and NESHAPs). Include at least one sample of target cave air (during operations with beam) in each cave, which sees beam during the calendar year. This includes reporting of air sampling results to EPA Region II.</li> <li>PCB Management</li> </ul>		C-A Environmental Compliance Representative (ECR)	Annual May 2003
<p><u>Results:</u></p>			
<p><u>Action Items:</u></p>			
Ensure that groundwater samples are collected and analyzed, documented and results are reported in a timely fashion back to C-A, results are reviewed to ensure that they meet expected trends		C-A Environmental Compliance Representative	Quarterly
<p><u>Results:</u></p>			
<p><u>Action Items:</u></p>			
Prepare and submit an updated listing of Satellite Accumulation Areas and communicate to Waste Management Division. Inspect and maintain any necessary records of Satellite Accumulation Areas		Environmental Coordinator	Annual September 2003

<u>Results:</u>			
<u>Action Items:</u>			
Develop an annual waste forecast and track waste generation on a quarterly basis. The C-A Environmental Coordinator shall review wastes and disposal pathways during the Work Planning Process. The Department shall bring forward to upper management the lab-wide issue of examining and reducing waste management costs in a manner that reflects the actual cost of efficient waste handling and disposal		Environmental Coordinator	Annual July 2003
<u>Results:</u>			
<u>Action Items:</u>			
Review all emission points for compliance, documentation, and forward any updates to the ESD Subject Matter Expert		C-A Environmental Compliance Representative	Annual March 2003
<u>Results:</u>			
<u>Action Items:</u>			
Audit to verify that applicable procedures are being followed.		QA Group	
<u>Results:</u>			
<u>Action Items:</u>			
Ensure that operational procedures are in place to respond to spill and that the procedures are in accordance to applicable subject areas		ESHQ Division Head	Annual September 2003
<u>Results:</u>			
<u>Action Items:</u>			
Set a goal of zero reportable spills and shall track performance and report performance via the EMS management review		ESHQ Division Head	Annual September 2003
<u>Results:</u>			
<u>Action Items:</u>			

Prepare and submit quarterly reports that track non-routine waste amounts and costs for disposal		Environmental Coordinator	Quarterly
<u>Results:</u>  <u>Action Items:</u>			
Maintain records and report on non-routine waste generated and cost of disposal		Environmental Coordinator	Quarterly
<u>Results:</u>  <u>Action Items:</u>			
Review all experiments, accelerator modifications, and work planning for compliance to SPDES permit requirements Generate and maintain approvals for release of liquid effluents not specifically authorized by the Liquid Effluent SA		C-A Environmental Compliance Representative	Annual
<u>Results:</u>  <u>Action Items:</u>			
Complete actions to achieve Article 12 conformance		C-A Environmental Compliance Representative	Annual June 2003
<u>Results:</u>  <u>Action Items:</u>			
Prepare a Water Systems Monitoring Plan for C-A Water Systems		C-A Environmental Compliance Representative	December 2002
<u>Results:</u>  <u>Action Items:</u>			
Develop procedures for compliance to the SA inspections and implement them with the appropriate line organization supervisors.		Environmental Coordinator and C-A Environmental Compliance Representative	Annual October 2002
<u>Results:</u>  <u>Action Items:</u>			



Ensure that all identified tanks are registered and appropriately labeled and maintain an up to date listing of C-A registered tanks		C-A Environmental Compliance Representative	Annual April 2003
<u>Results:</u>  <u>Action Items:</u>			
Facilitate and participate in applicable assessments and complete Compliance Assessment Cards in accordance with the Environmental Assessments SA		QA Office and C-A Environmental Compliance Representative	Annual June 2003
<u>Results:</u>  <u>Action Items:</u>			
Facilitate and participate in Spill Response assessment and complete Compliance Assessment Cards in accordance with the Environmental Assessments SA		QA Office and C-A Environmental Compliance Representative	Annual March 2003
<u>Results:</u>  <u>Action Items:</u>			
Maintain records and report progress against waste goals and, where appropriate, suggest P2 opportunities		Environmental Coordinator	Quarterly
<u>Results:</u>  <u>Action Items:</u>			
Soil caps maintained and inspected as required.		ES&F Division	Annual
<u>Results:</u>  <u>Action Items:</u>			
Work with ERD to review and determine best method to deal with g-2 tritiated plume (EE/CA).		ESHQ Division Head	March 2003
<u>Results:</u>  <u>Action Items:</u>			

Evaluate the potential for soil activation and rainwater infiltration to cause groundwater contamination greater than 5% of DWS at the Linac Beam Stops (4), Blip-Y, and AGS H-Areas. Develop plan for engineering controls, as needed.		ESHQ Division Head	July 2003
<u>Results:</u>  <u>Action Items:</u>			
Radiological Control Excellence: C-A Collective Dose Goal for FY 03 is 17.5 person-rem This was the recommended dose goal as stated in memorandum "Proposed C-A FY 2003 Collective Dose Goal", dated 10/24/2002.		Associate Chair for ESHQ	Quarterly (Performance Indicator)
<u>Results:</u>  <u>Action Items:</u>			
Periodically measure all radionuclides that could contribute at least 10% of the potential effective dose equivalent for the effluent source.		Radiation Control	Annual
<u>Results:</u>  <u>Action Items:</u>			
Measure 3.2.2.3 - OSHA Reportable Injury Management Lost Workday Case Rate(LWCR) CY 03 Goal = <.6		Associate Chair for ESHQ	Quarterly (Performance Indicator)
<u>Results:</u>  <u>Action Items:</u>			
Measure 3.2.2.1 Pollution Prevention Verify that C-A is actively involved in the BNL Pollution Prevention Program . i.e. by submitting at least two pollution prevention project proposals to the P2 Council and/or two success stories and/or lesson learned stories, include the construction of the BAF in accordance with Article 12 requirements		Associate Chair for ESHQ and C-A Environmental Compliance Representative	Annual May 2002
<u>Results:</u>  <u>Action Items:</u>			

Perform tank inspections in accordance with applicable procedures and maintain documentation of inspections		Cryogenics System Supervisor	January 2003
<u>Results:</u>  <u>Action Items:</u>			
Track the number of unusual or off normal events associated with groundwater impacts in current operations		ESHQ Division Head	Quarterly
<u>Results:</u>  <u>Action Items:</u>			
Pursue High Return on Investment (ROI) P2 funding from DOE for installation of additional ozone water treatment system for RHIC STAR cooling tower		ESHQ Division Head/ C-A Environmental Compliance Representative	Not funded
<u>Results:</u>  <u>Action Items:</u>			
Proceed with connection of RHIC tower blow-down to storm water system and control blow-down to minimize local erosion		Water System Group Leader	In Progress
<u>Results:</u>  <u>Action Items:</u>			
Perform planned upgrades to C-A water systems in accordance with ADS # 0007 and track progress		Water System Group Leader	In Progress
<u>Results:</u>  <u>Action Items:</u>			
Audit systems, whose failure could create a significant environmental impact, to ensure that maintenance is adequate and performed to appropriate schedules. Audits shall include, but not be limited to fire protection system maintenance, activated water system monitoring equipment/alarms		QA Office	Annual April 2003
<u>Results:</u>  <u>Action Items:</u>			